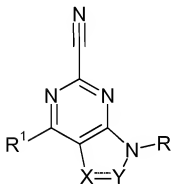


Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (currently amended) A compound of formula (I):



(I)

in which:

X is N or NH;

Y is :CH, CO, CH₂ or :CNR²R³, where R² and R³ are independently hydrogen, C₁₋₆ alkyl or C₃₋₆ cycloalkyl;

R is aryl or heteroaryl optionally substituted by halogen, amino, hydroxy, cyano, nitro, trifluoromethyl, carboxy, CONR⁵R⁶, SO₂NR⁵R⁶, SO₂R⁴, NHSO₂R⁴, NHCOR⁴, ethylenedioxy, methylenedioxy, C₁₋₆ alkyl, C₁₋₆ alkoxy, SR⁴ or NR⁵R⁶ where R⁴ is hydrogen, C₁₋₆ alkyl or C₃₋₆ cycloalkyl, R⁵ and R⁶ are independently hydrogen, C₁₋₆ alkyl or together with the nitrogen atom to which they are attached form a 5- or 6-membered saturated ring optionally containing a further O, S or NR⁴ group;

or R is C₁₋₆ alkyl or C₃₋₆ cycloalkyl both of which can optionally contain one or more O, S or NR⁴ groups,

R¹ is a group Y(CH₂)_pR⁷ where p is 0, 1 or 2 and Y is O or NR⁸ where R⁸ is hydrogen, C₁₋₆ alkyl or C₃₋₆ cycloalkyl;

and R⁷ is a 5- or 6-membered saturated ring containing one or more O, S or N atoms, aryl or a heteroaryl group containing one to four heteroatoms selected from O, S or N, the saturated ring, aryl and heteroaryl groups all being optionally substituted by halogen, amino, hydroxy, cyano, nitro, trifluoromethyl, carboxy, CONR⁵R⁶, SO₂NR⁵R⁶, SO₂R⁴, NHSO₂R⁴, NHCOR⁴, C₁₋₆ alkyl, C₁₋₆ alkoxy, SR⁴ or NR⁵R⁶ where R⁴ is hydrogen, C₁₋₆ alkyl or C₃₋₆ cycloalkyl, R⁵ and R⁶ are independently hydrogen, C₁₋₆ alkyl or together with the nitrogen atom to which they are attached form a 5- or 6-membered saturated ring optionally containing a further O, S or NR⁴ group;

or R¹ is a group NR⁹R¹⁰ where R⁹ and R¹⁰ are independently hydrogen or C₁₋₆ alkyl-~~optionally containing one or more O, S or NR⁴ groups~~, or R⁹ and R¹⁰ together with the nitrogen atom to which they are attached form a 5 or 6-membered saturated ring optionally containing a further O, S or N atom and optionally substituted by a second NR⁹R¹⁰ where R⁹ and R¹⁰ are independently hydrogen or C₁₋₆ alkyl or R⁹ and R¹⁰ together with the nitrogen atom to which they are attached form a 5 or 6-membered saturated ring optionally containing a further O, S or NR⁴, CO₂C₁₋₆ alkyl, CONR¹¹R¹² where R¹¹ and R¹² are independently hydrogen or C₁₋₆ alkyl, aryl or heteroaryl group optionally substituted by halogen, amino, hydroxy, cyano, nitro, trifluoromethyl, carboxy, CONR⁵R⁶, SO₂NR⁵R⁶, SO₂R⁴, NHSO₂R⁴, NHCOR⁴, C₁₋₆ alkyl, C₁₋₆ alkoxy, SR⁴ or NR⁵R⁶ where R⁴ is hydrogen, C₁₋₆ alkyl or C₃₋₆ cycloalkyl, R⁵ and R⁶ are independently hydrogen, C₁₋₆ alkyl or together with the nitrogen atom to which they are attached form a 5- or 6-membered saturated ring optionally containing a further O, S or NR⁴ group; and pharmaceutically acceptable salts or solvates thereof.

Claim 2. (previously presented) A compound according to claim 1 in which X is N and Y is :CH.

Claim 3. (previously presented) A compound according to claim 1, wherein R is C₁₋₄alkyl, or phenyl substituted by halogen, SO₂Me, C₁₋₆alkoxy or C₁₋₄alkyl.

Claim 4. (previously presented) A compound according to claim 1, wherein R¹ is a group Y(CH₂)_pR⁷ where p is 0 and Y is NR⁸ where R⁸ is hydrogen and R⁷ is substituted phenyl.

Claim 5. (previously presented) A compound according to claim 1, wherein R¹ is NR⁹R¹⁰ where R⁹ and R¹⁰ are hydrogen or C₁₋₃ alkyl or together with the nitrogen atom to which they are attached form a 5 or 6-membered saturated ring optionally containing a further O, S or NR⁴.

Claim 6. (previously presented) A compound selected from:

1-[9-(4-Chlorophenyl)-2-cyano-9H-purin-6-yl]-L-prolinamide,
9-(4-Chlorophenyl)-6-(4-pyrrolidin-1-yl)piperidin-1-yl-9H-purine-2-carbonitrile,
9-(4-Chlorophenyl)-6-[(3-pyrrolidin-1-ylpropyl)amino]-9H-purine-2-carbonitrile,
6-(4-Aminopiperidin-1-yl)-9-(4-chlorophenyl)-9H-purine-2-carbonitrile,
6-[(2-Aminoethyl)amino]-9-(4-chlorophenyl)-9H-purine-2-carbonitrile,
9-(4-Chlorophenyl)-6-(dimethylamino)-9H-purine-2-carbonitrile,
9-(4-Methylphenyl)-6-pyrrolidin-1-yl-9H-purine-2-carbonitrile,
9-(4-Methoxyphenyl)-6-pyrrolidin-1-yl-9H-purine-2-carbonitrile,
9-(4-chlorophenyl)-6-pyrrolidin-1-yl-9H-purine-2-carbonitrile,
9-(4-Chlorophenyl)-6-(ethylamino)-9H-purine-2-carbonitrile,
tert-Butyl 4-[9-(4-chlorophenyl)-2-cyano-9H-purin-6-yl]piperazine-1-carboxylate,
9-(4-Chlorophenyl)-6-piperazin-1-yl-9H-purine-2-carbonitrile,
9-(2-Chlorophenyl)-6-morpholin-4-yl-9H-purine-2-carbonitrile
9-(3,4-Difluorophenyl)-6-morpholin-4-yl-9H-purine-2-carbonitrile,
9-(4-Isopropylphenyl)-6-morpholin-4-yl-9H-purine-2-carbonitrile,
9-(4-Methoxyphenyl)-6-morpholin-4-yl-9H-purine-2-carbonitrile,
9-(3-Chlorophenyl)-6-morpholin-4-yl-9H-purine-2-carbonitrile,
9-[4-(Methylsulfonyl)phenyl]-6-morpholin-4-yl-9H-purine-2-carbonitrile,
6-[(4-Chlorophenyl)amino]-9-ethyl-9H-purine-2-carbonitrile,
9-(4-Chlorophenyl)-6-morpholin-4-yl-9H-purine-2-carbonitrile,
8-Amino-6-[(4-chlorophenyl)amino]-9-ethyl-9H-purine-2-carbonitrile,
8-Amino-9-(4-chlorophenyl)-6-morpholin-4-yl-9H-purine-2-carbonitrile,
9-(4-Chlorophenyl)-6-morpholin-4-yl-8-oxo-8,9-dihydro-7H-purine-2-carbonitrile,
9-(4-Chlorophenyl)-8-(dimethylamino)-6-morpholin-4-yl-9H-purine-2-carbonitrile,

and pharmaceutically acceptable salts thereof.

Claim 7. (cancelled)

Claim 8. (cancelled)

Claim 9. (cancelled)

Claim 10. (previously presented) A pharmaceutical composition which comprises a compound of the formula (I) as defined in claim 1 or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable diluent or carrier.

Claim 11. (currently amended) A method for producing inhibition of at least one cysteine protease chosen from cathepsins S, K, L, F and B in a mammal comprising administering to said mammal an effective amount of a compound as defined in claim 1, or a pharmaceutically acceptable salt thereof.

Claim 12. (previously presented) A method for treating pain in a mammal in need of such treatment comprising administering to said mammal an effective amount of a compound as defined in claim 1, or a pharmaceutically acceptable salt thereof.

Claim 13. (previously presented) A method for inhibiting Cathepsin S in a warm blooded animal comprising administering a compound of the formula (I) as defined in claim 1 or a pharmaceutically acceptable salt thereof to a warm blooded animal.

Claim 14. (previously presented) A pharmaceutical composition which comprises a compound of the formula (I) as defined in claim 6 or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable diluent or carrier.

Claim 15. (currently amended) A method for producing inhibition of at least one cysteine protease chosen from cathepsins S, K, L, F and B in a mammal comprising administering to said mammal an effective amount of a compound as defined in claim 6, or a pharmaceutically acceptable salt thereof.

Claim 16. (previously presented) A method for treating pain in a mammal in need of such treatment comprising administering to said mammal an effective amount of a compound as defined in claim 6, or a pharmaceutically acceptable salt thereof.

Claim 17. (previously presented) A method for inhibiting Cathepsin S in a warm blooded animal comprising administering a compound of the formula (I) as defined in claim 6 or a pharmaceutically acceptable salt thereof to a warm blooded animal.